

**MPR 2500.1  
REVISION C**

**EFFECTIVE DATE: September 27, 2004  
EXPIRATION DATE: September 27, 2009**

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# **MARSHALL PROCEDURAL REQUIREMENTS**

**AD01**

## **MARSHALL TELECOMMUNICATIONS AND AUDIO VISUAL SERVICES**

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## DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		11/1/99	Consolidates procedures for all MSFC telecommunications services into one document. Paragraph A-1.3: added "FTS calling cards shall be used for official Government business calls only." Paragraph A-1.4.1: added "The cellular phone can be programmed to automatically dial the card number; and ISD can assist with the programming."
Revision	A	6/11/2003	Changed "Information Services Department (ISD)" to "Office of the Chief Information Officer (CIO)" throughout document. Changed title of Chapter 1 from "Telephone Services" to "Communication Services". Changed title of Chapter 2 from "Radio and Pager Services" to "Radio and Radio Frequency Services". Table of Contents: changed "Telephone Services" to "Communication Services" and "Radio and Pager Services" to "Radio and Radio Frequency Services". In the "Document Content" section: paragraph 2.2.1 deleted "coordinating". Paragraph 5 of "Document Content": deleted the Flow Diagram and inserted a new Flow Diagram. In the "Communications Services" section: paragraph 1.1.9 changed "Customer Support Center" to "NASA Information Support Center (NISC)". Paragraphs P-1, 1.1: added the term "wireless communications devices". Paragraph P.4 added "g. NPG 1441.1 NASA Records Retention Schedules". Paragraph 1.1.12.4: added description of the ITE-30 telephone. Added Paragraph 1.1.12.5: Wireless Communication Devices. Paragraphs 1.2.1.4, 1.2.2.1 added "pagers, radios, and wireless communications devices." Deleted Paragraph A-1.2.2. Paragraph A-1.4.1 Deleted "The cellular phone can be programmed to automatically dial the card number; and ISD can assist with the programming." Added Paragraphs A-1.8 "Power Fail Phones". Added Paragraph A-1.9 "Areas of Refuge". Added Paragraph A-1.10 "Government Emergency Telecommunications Cards". Moved Paragraph 2.1.1 to 1.1.14. Moved Paragraph 2.1.4 to 1.1.15. Paragraph 2.2.1: added "per NHB 2570.6" and "Spectrum Manager". Deleted Paragraphs 2.2.3.3 and 2.2.3.4. Added Paragraph: 2.2.5.6 Assuring that all RF equipment procured and in use at, and under, MSFC responsibility meets the requirements of the "IEEE Standard for Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 KHz to 300 GHz" ANSI/IEEE C95.1 - 1992. This document is generally accepted and referenced by FCC/NTIA/ARRL etc. Paragraph 2.2.6 Changed "The Manager, Procurement Office" to "The Director, Procurement Office". Paragraph 2.3.3.1: Changed text from "Although the NASA contract itself may be written by other NASA contracting agencies", to "Although other NASA contracting agencies may write the NASA contract itself." Paragraph 3.2.1.7 changed "Coordinator" to "Preparedness Officer". Deleted Paragraphs 3.2.1.3 and 3.2.1.8. Paragraph 3.3.5 added reference to Digital Video Disk (DVD) productions.
Revision	B	6/7/2004	Changed title of document from "Marshall Telecommunications Services" to "Marshall Telecommunications and Audio Visual Services." Added "and visual aids" to Paragraph P 1. Paragraph 1.1 deleted "multi-media." Paragraph CH1.1.12.2, changed definition title from "ITE-12' and ITE-12S" to "ITE-12, ITE-12S, and ITE-12SD," added "The ITE-12SD has a calling number display (caller-ID)" to the definition. Paragraph 1.3 added "multimedia and visual aids." Changed title of Chapter 3 from "Multi-Media Services" to "Multimedia and Visual Aids Services." Added Paragraph CH3.1.10 "Visual Aid." Added Paragraph

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			CH3.2.1.8 "Visual Aids Library." Added Paragraph CH3.2.2.2 "Visual Aids Library." Paragraph CH3.1.9 changed "high-speed motion" to "high-speed still and motion." Added "and Audio Visual" to the document header. Deleted CH2.3.4.2. Added 4.1, 4.2, 4.3, and 4.4.
Revision	C	9/27/2004	Reformatted to MPR as part of CAITS Action 04-DA01-0387

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## PREFACE

### P.1 PURPOSE

The purpose of this Directive is to establish the procedure for obtaining telecommunications services, including telephone, radio, pager, wireless communication devices, and multimedia and visual aids services at Marshall Space Flight Center (MSFC).

### P.2 APPLICABILITY

This Directive is applicable to all MSFC organizations (including Michoud Assembly Facility [MAF]), all MSFC support contractors, and other supporting organizations regardless of location.

### P.3 AUTHORITY

- a. NPD 2570.5, "Radio Frequency Spectrum Management"
- b. MPD 2800.1, "Management of Information Technology Systems and Services"

### P.4 APPLICABLE DOCUMENTS

- a. NPD 2530.1, "Monitoring or Recording of Telephone or Other Conversations"
- b. NPD 2540.1, "Use of Government Telephones"
- c. NPD 2570.5, "Radio Frequency Spectrum Management"
- d. MPD 1394.1, "Control of Audiovisual Products"
- e. MWI 5100.1, "Initiating Procurement Requisitions"
- f. 14 CFR 1221, "The NASA Seal and other devices, and the Congressional Space Medal of Honor"
- g. NPR 1441.1, "NASA Records Retention Schedules"

### P.5 REFERENCES

14 CFR 1221

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## **P.6 CANCELLATION**

MPG 2500.1B dated June 7, 2004

Original signed by  
Robin N. Henderson for

David A. King  
Director

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## DOCUMENT CONTENT

### 1. DEFINITIONS

1.1 Telecommunications Services. All telephone, radio, pager, wireless communication devices, and services provided by MSFC, Office of the Chief Information Officer (CIO).

1.2 Telecommunications Coordinator. A person assigned by a user organization as the point of contact for coordinating communication services within the organization.

1.3 Definitions specific to each type of telecommunications, multimedia, and visual aids service are provided in the subsequent chapters detailing the procedures for those services.

### 2. RESPONSIBILITIES - GENERAL

2.1 Specific responsibilities for each type of telecommunications service are provided in the respective chapter for that service.

2.2 Directors/Managers of MSFC Directorates, Projects, and Staff Offices shall designate administrative officers or other personnel to serve as coordinators for telecommunications services within the organization.

2.3 Coordinator shall:

2.3.1 Review and validate telecommunications service requirements, including telephone instrument relocations, initiated by personnel requiring the service within the organization(s) represented by the coordinator.

2.3.2 Coordinate with the Office of the CIO when projects are planned which require telecommunications services. Notify the MSFC CIO of the initiation of special projects and meetings related to the planning of projects.

2.3.3 Obtain approval of the appropriate officials within the coordinator's organization for the addition of the requested services and ensure that funding is available and the fund code is included with the service request.

2.3.4 Monitor use of telecommunications equipment and identify unused equipment for return to the Office of the CIO.

2.3.5 Coordinate the acceptance by the responsible organization official of telecommunications facilities and services which have been supplied.

2.3.6 Assist the Office of the CIO in preparing and maintaining up-to-date records of telecommunications equipment and facilities.

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2.3.7 Obtain required telephone calling cards from the Office of the CIO and issue these to the users.

### **3. PROCEDURE - GENERAL**

3.1 The general procedure for obtaining telecommunications services is:

3.1.1 The customer or organizational coordinator shall prepare request and shall obtain required organizational management approval or funding source if applicable.

3.1.2 If prior Office of the CIO authorization or coordination is required, the customer shall obtain it.

3.1.3 The customer or organizational coordinator shall submit the request via the Service Request System (SRS). The SRS can be accessed via the World Wide Web at the following address:

<https://srs.msfc.nasa.gov/catalog/bin/home.asp>

3.1.4 The Office of the CIO shall approve request and shall provide service.

3.1.5 The Office of the CIO shall validate service and/or customer satisfaction.

3.2 Procedures specific to each type of telecommunications service are provided in the subsequent chapters for those services.

### **4. RECORDS**

4.1 Service Request's submitted via the MSFC SRS catalog are stored on the MSBRAVO4 server within the Remedy software data base located in building 4207. These records shall be destroyed when no longer needed for reference or work use. (NRRS 2/16A)

4.2 Engineering assessments for special services shall be maintained by the Office of the Chief Information Officer support contractor within work package files of the assessing engineer. If the project was not implemented, the work package shall be destroyed one year after final decision. If the project was implemented, the work package shall be destroyed 5 years after project is terminated. (GRS 24/11)

4.3 Copies of MSFC Radio Frequency spectrum assignments, and Radio Frequency Authorizations (MSFC form 1040) shall be maintained by the MSFC Spectrum Manager and the Office of the Chief Information Officer support contractor. They are temporary records that shall be destroyed when superseded, obsolete, or no longer needed. (NRRS 2/20B)



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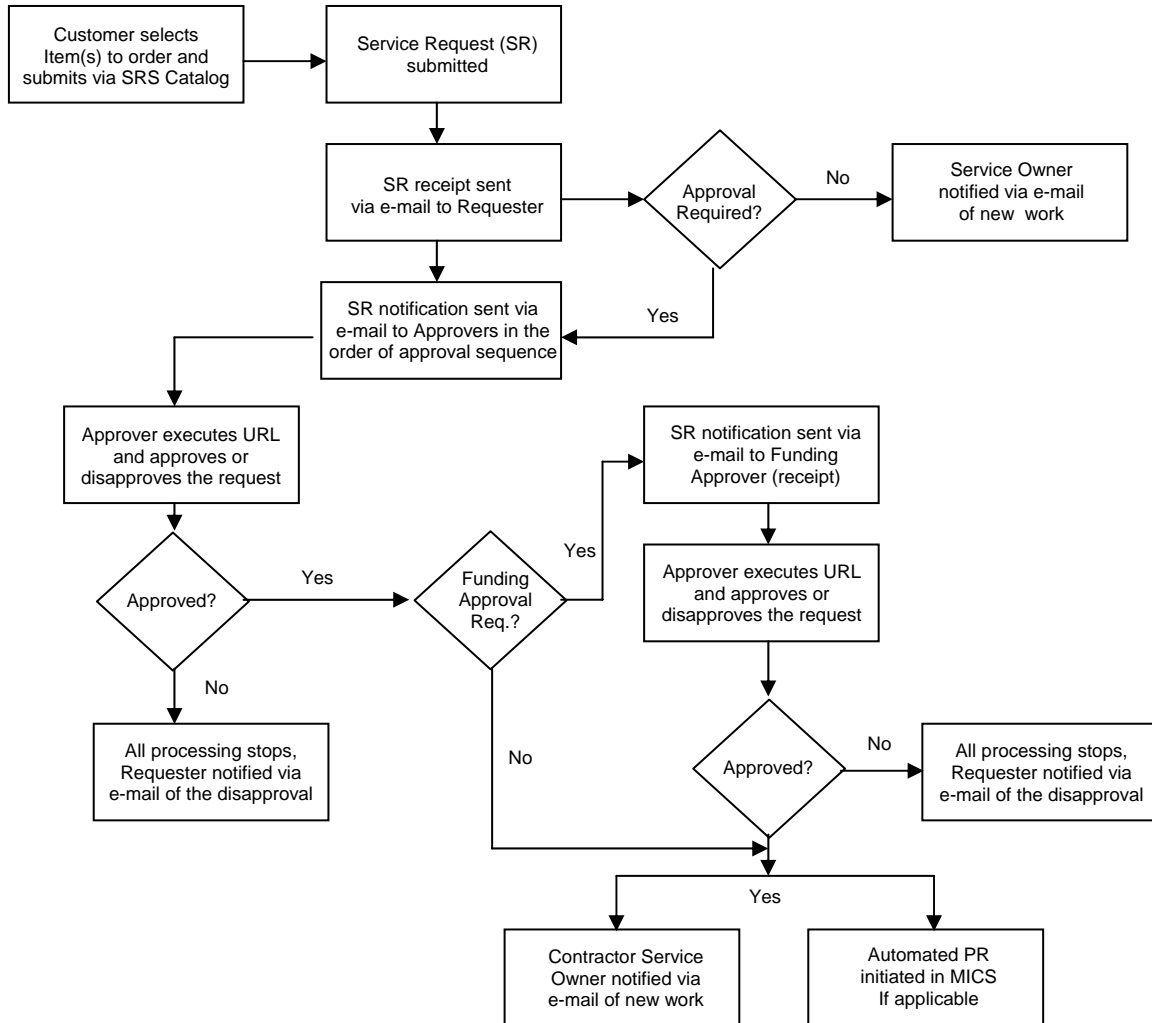
4.4 Historical photographic and motion picture film materials shall be stored in buildings 4353 and 4207. Photographs and still negatives are permanent records that shall be retired to the Federal Records Center in one year blocks when 5 years old. They shall be transferred to NARA in 5 year blocks when 25 years old or sooner (NRRS 2/23/B/1/c). Motion picture film materials are permanent records. They shall be transferred to NARA in College Park, MD when 5 years old. Materials to be included shall be original negative or color original plus sound track; and intermediate master positive or duplicate negative plus sound track; and sound projection print, along with complete identifying information. This shall be coordinated with HQ before shipment. (NRRS 1/71/D/1/a)

## 5. FLOW DIAGRAM

The following flow diagram depicts the general procedure for providing all telecommunications services.

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## FLOW DIAGRAM – TELECOMMUNICATIONS SERVICES



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## CHAPTER 1

### COMMUNICATION SERVICES

#### CH1.1 Definitions

CH1.1.1 Calling Cards. Federal Telecommunications System (FTS) calling cards are cards available for use by MSFC employees during authorized travel or while conducting official Government responsibilities when direct connection to FTS is unavailable.

CH1.1.2 Calling Number Display Units. Telephone units that allow an individual to monitor the source of incoming calls.

CH1.1.3 Cellular Telephones. Mobile wireless telephone service.

CH1.1.4 Conference Sets. Telephone units similar to speakerphones but equipped with multiple microphones and/or speakers to support group meetings in offices and conference rooms.

CH1.1.5 Headsets. Devices that allow the users to replace the handset with a headset to operate the telephone without using their hands.

CH1.1.6 Hearing Impaired Handsets. Telephones that are designed for the hearing impaired.

CH1.1.7 International Calls. Calls that are placed to numbers outside the United States.

CH1.1.8 Multi-Line Capability. Allows the user to have more than one telephone line (number) connected to the telephone. This function is mainly utilized by management support assistants and similar positions in support of management personnel.

CH1.1.9 Quick Reference Card. A wallet-size information card with detailed instructions for accessing the MSFC voice mail system while on travel. Telephone numbers for the Emergency Operations Center, NASA Information Support Center (NISC), NASA Automated Data Processing (ADP) Consolidation Center (NACC) Operations, MSFC Security, and Operator Assistance are also included on the card.

CH1.1.10 Speakerphone. Device that allows the user to switch from a handset to a speaker, thus enabling hands-free operation.

CH1.1.11 Telephone Service. A standard unit of telephone service is defined as one telephone, one directory number, and one line per person.

CH1.1.12 Telephone Instruments. The hardware required to provide telephone service.

CH1.1.12.1 Integrated Terminal Equipment (ITE)-4. A digital 4-feature button telephone. This

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instrument is the digital equivalent to the Standard Telephone Equipment (STE).

CH1.1.12.2 ITE-12, ITE-12S, and ITE-12SD. A digital 12-feature button telephone with multi-line capability. This telephone is intended for management personnel only. The ITE-12S is available for management personnel requiring speakerphone capability. The ITE-12SD has a calling number display (caller-ID).

CH1.1.12.3 ITE-24. A digital 24-feature button telephone with multi-line capability and calling number display (caller-ID). This telephone is intended for management support assistants and similar positions.

CH1.1.12.4 ITE-30. A digital 30-feature button telephone with multi-line capability and calling number display (caller-ID). This telephone is intended for management support assistants and similar positions and is a replacement for the ITE-24.

CH1.1.12.5 Standard Telephone Equipment (STE). The standard analog telephone included in the base telephone service.

CH1.1.13 Wireless Communication Devices. Electronic devices that have the capability to communicate/interface wirelessly with the Internet and other electronic devices. These devices include, but are not limited to, handheld computers, Personal Digital Assistants (PDAs), and wireless e-mail technologies.

CH1.1.14 Nationwide Radio Pagers. Paging units that cover most of the United States metropolitan areas.

CH1.1.15 Regional Radio Pagers. Paging units that provide coverage within the State of Alabama.

## **CH1.2 Responsibilities**

CH1.2.1 Office of the Chief Information Officer Responsibilities. The MSFC CIO, or designated representative(s), shall:

CH1.2.1.1 Provide a standard unit of telephone service as defined.

CH1.2.1.2 For data connections and data services, provide a digital interface to an analog modem pool. No dial-out data access shall be allowed without sufficient justification. Dial-out access shall require verification of security issues and the approval of the director/manager of the requesting organization.

CH1.2.1.3 Approve requests for individual computer connections and the mode of operation for connections outside the MSFC data network through the MSFC telephone system.

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CH1.2.1.4 Approve appropriately submitted and funded requests for cellular telephones, pagers, and wireless communication devices.

CH1.2.1.5 Approve exceptions for non-FTS cellular telephone credit card charges. The FTS calling cards shall be obtained through the organizational telecommunications coordinator.

CH1.2.1.6 Maintain a loaner pool of cellular telephones.

CH1.2.1.7 Approve organizational requests for FTS calling cards.

CH1.2.1.8 Approve telephones for hallways, conference rooms, and common areas.

CH1.2.1.9 Approve requests for individual telephone numbers to be forwarded offsite.

CH1.2.1.10 Approve in advance the attachment of any devices to the MSFC telephone system.

CH1.2.2 Directors/Managers of Basic Organizations or designated representative (at least department level or higher unless otherwise noted) shall:

CH1.2.2.1 Approve organizational requests for cellular telephones, pagers, and wireless communication devices. Provide required funding, including sustaining charges, to support each request.

CH1.2.2.2 Approve requests for FTS calling cards.

CH1.2.2.3 Approve requests for the installation of building paging systems and telephone access to these systems.

CH1.2.2.4 Approve requests for headsets. Nonstandard headsets shall require funding by the requesting organization.

CH1.2.2.5 Approve requests for hearing-impaired handsets. These requests shall be approved by the user's group lead.

CH1.2.2.6 Approve requests for ITE-12 and ITE-12S phones for personnel other than group leads or higher management.

CH1.2.2.7 Approve requests for calling number display units for the use of an individual who is required to monitor the source of incoming calls.

CH1.2.2.8 Ensure that the Office of the CIO approval is obtained prior to the attachment of any non-Office of the CIO provided devices to the MSFC telephone system. Examples of such devices include speakerphones, answering machines, telephone instruments, modems, fax machines, etc.

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CH1.2.3 All Employees shall be responsible for using Government-provided telephone systems for official business in compliance with NASA policy directives (NPD 2530.1 and NPD 2540.1).

### **CH1.3 Procedure**

CH1.3.1 The customer shall request telephone service via the SRS as described in Document Content – Section 3 of this document.

CH1.3.2 The customer's management shall review and approve or disapprove the request in accordance with NASA policy (NPD 2530.1; NPD 2540.1) and the criteria for MSFC telephone services included in the appendix (A-1) to this chapter.

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## Appendix A-1

### CRITERIA FOR PROVISION OF MSFC TELEPHONE SERVICES

#### A-1.1 Standard Telephone Service:

A-1.1.1 The Office of the CIO shall provide basic telephone service based upon one telephone, one directory number, and one line per person.

A-1.1.2 Standard single line telephone equipment requested by an organization for a new employee shall not require Office of the CIO approval.

#### A-1.2 Speakerphones:

ITE-12S phones shall be authorized for group leads or higher management; otherwise, ITE-12S phones shall require the approval of the director/manager of the requesting organization.

#### A-1.3 Calling Cards:

FTS calling cards shall be available for use during authorized travel or conducting official Government responsibilities when direct connection to FTS is unavailable. Approvals by the requesting office/department manager and the MSFC CIO shall be required. FTS calling cards shall be used for official Government business calls only.

#### A-1.4 Long-Distance Telephone Service:

A-1.4.1 FTS shall be used for making official long-distance telephone calls except:

- a. When an emergency makes it necessary to place a commercial call; i.e., FTS is not available. Non-FTS calls placed from a Government telephone shall be placed through the MSFC operator.
- b. When a call is placed from a commercial or private (off-net) telephone. Calls from such telephones shall be placed using Government-provided FTS calling cards.

A-1.4.2 Employees shall make only official calls and authorized personal calls from official telephones.

A-1.4.3 Employees shall use the most economical means of communication, keeping calls as short and business-like as practicable. This helps assure availability of service to other users and helps minimize costs for such service.

A-1.4.4 Employees shall accept no collect calls from non-Government sources, except calls that have previously been authorized. Collect calling shall be discouraged.

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A-1.4.5 Persons on authorized travel and placing a call from a telephone not directly connected to FTS shall:

- a. Place the call using a Government-provided FTS calling card, or
- b. Place the call through a long-distance or hotel operator and pay for the call. (Reimbursement for official telephone calls is authorized when properly certified on a travel voucher.)

#### A-1.5 International Calling:

Direct dial international calling shall not be allowed. All international calls shall be placed by one of the following methods:

- a. Through the NASA Information Support Center (NISC), commonly known as the “Help Desk,”
- b. By dialing “0” and having the MSFC operator place the call, or
- c. Using an FTS calling card.

#### A-1.6 Special Telecommunications Services:

Special services that affect the integrity of MSFC communications systems shall require an engineering assessment prior to approval, e.g., establishing broadcast groups for voice mail announcements.

#### A-1.7 Restricted Access:

At the request of organizational director/manager, the Office of the CIO shall implement restricted access to limit calling privileges from requested telephones.

#### A-1.8 Power Fail Phones:

There are 28 Power Fail phones distributed across the MSFC Center. These phones shall not be connected to the MSFC telephone switch, and therefore do not rely on MSFC infrastructure to provide dial tone. Their intended use shall be for emergency situations only (i.e., the MSFC telephone switch ceases to function due to loss of power or disaster). These phones shall be clearly identified with a sign that reads “Emergency Use Only.”

#### A-1.9 Areas of Refuge:

Designated areas in buildings to be used by those needing special assistance when required to evacuate the premises due to an emergency (e.g., fire). These areas are clearly marked with a sign that has a handicap symbol and reads “Fire Rescue.”



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Telephones shall be installed in these areas. The phones shall be programmed to allow calls to all onsite and offsite locations when fire evacuations occur. The phones shall be installed at heights that comply with the Americans with Disability Act.

#### A-1.10 Government Emergency Telecommunications (GETS) Cards:

The Government Emergency Telecommunications System (GETS) provides users, during emergencies and the loss of normal long distance telephone services, to access a control point that routes telephone communications through an emergency network and around the points of failure.

Users of GETS are provided with a card containing instructions for use, a control operator telephone number, and a pin number. The pin number, along with the telephone number being called, is provided to the control operator for completion of the call.

GETS cards shall be obtained from the Office of the CIO.

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## CHAPTER 2

### RADIO AND RADIO FREQUENCY SERVICES

#### CH2.1 Definitions

CH2.1.1 Radio Frequency (RF) Management. The effective allocation of the RF spectrum to prevent harmful interference and waste of the RF spectrum as a natural resource.

CH2.1.2 Radio Services. The provision of hand-held and mobile radios that operate at MSFC and within the local area.

CH2.1.3 RF Allocation. The process of setting aside a portion of the RF spectrum for a particular use or service. A Table of Frequency Allocations reflects such a division of the radio spectrum.

CH2.1.4 RF Assignment. An authority to operate on a particular frequency. When such a frequency is assigned, it is the license for that radio station to operate on that specific frequency.

CH2.1.5 RF Energy. The electromagnetic energy which is radiated in the RF spectrum.

CH2.1.6 RF Interference Reduction. The capability of identifying, measuring, and locating sources of harmful electromagnetic interference.

CH2.1.7 RF Scheduling Coordination. To confine within the cognizant test range local frequency assignments and to ensure RF interference protection as necessary with the Area Frequency Coordinator.

CH2.1.8 RF Support. The availability of authorized segments of the RF spectrum to accommodate the operating requirements of particular electronic equipment.

#### CH2.2 Responsibilities

CH2.2.1 The Center Director, per NPD 2570.5, shall designate an engineer in the Office of the CIO as the MSFC Spectrum Manager.

CH2.2.2 The MSFC CIO shall:

CH2.2.2.1 Provide basic radio and paging services for MSFC.

CH2.2.2.2 Designate an alternate MSFC Spectrum Manager.

CH2.2.3 Responsibilities of Directors/Managers of Basic Organizations or designated representatives(s) shall include the following with respect to each type of service:

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CH2.2.3.1 RF Spectrum - The directors/managers shall ensure that any RF spectrum use required by their organizations is managed in coordination with the MSFC spectrum manager and in compliance with NPD 2570.5.

CH2.2.3.2 Radio Services - The user organization shall be responsible for funding the cost of requested equipment, other than basic service, and for providing annual funding for equipment maintenance. Current pricing information and basic service definition shall be made accessible via the SRS.

CH2.2.3.3 Telecommunication Systems - Managers at all levels of MSFC management planning the use of, conducting experiments relating to, or developing and procuring telecommunications systems requiring the use of RFs shall be responsible for securing the approval of the MSFC spectrum manager before initiating procurement action or budget submission.

CH2.2.4 Department/Office Managers shall be responsible for ensuring that all space vehicles and spacecraft under cognizance of MSFC are equipped with the ability to control electromagnetic emissions on and off by remote command unless there is a human presence with the direct capability to control those emissions on and off. This requirement shall be included as an integral part of the development and planning of the space project. However, this requirement may be waived for short-duration missions.

CH2.2.5 The MSFC Spectrum Manager shall be responsible for the following at MSFC and all NASA field sites under MSFC jurisdiction:

CH2.2.5.1 Coordinating all of the RF spectrum requirements pertaining to activities and projects involving MSFC with the NASA Spectrum Management Program Office.

CH2.2.5.2 Maintaining an accurate data base of the status of all RF spectrum assignments in use at MSFC, including:

- a. Deleting the requirements no longer required,
- b. Modifying assignments as necessary,
- c. Reviewing all assignments at least every 5 years from the date of original assignment.

CH2.2.5.3 Assuring day-to-day interference-free operation at MSFC and incident reporting to the NASA Spectrum Management Program Office.

CH2.2.5.4 Assuring that communications and RF spectrum requirements for future missions are identified as early as possible and reported to the NASA Spectrum Management Program Office for inclusion in the NASA long-range spectrum forecasts.

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CH2.2.5.5 Participating in local and national frequency management coordination groups, as appropriate, to provide representation and cognizance of MSFC's communications requirements.

CH2.2.5.6 Assuring that all RF equipment procured and in use at, and under, MSFC responsibility meets the requirements of the "IEEE Standard for Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 KHz to 300 GHz" ANSI/IEEE C95.1 - 1992. This document is generally accepted and referenced by FCC/NTIA/ARRL, etc.

CH2.2.6 The Director, Procurement Office, shall be responsible for assuring that no communication-electronic systems using the RF spectrum at any location under the responsibility of MSFC shall be procured until a signed MSFC Form 1040 provided by the Center Spectrum Manager is attached to the specifications.

### **CH2.3 Procedure**

CH2.3.1 Customers shall:

For all equipment capable of transmitting RFs at any location under the responsibility of MSFC, obtain certification (MSFC Form 1040) from MSFC Spectrum Manager that the required radio spectrum has been authorized for use.

CH2.3.2 Director/Manager of customer's organization shall:

CH2.3.2.1 Review and approve or disapprove the request for service in accordance with all appropriate provisions for RF assignment and allocation as provided in the appendix (A-2) to this chapter.

CH2.3.2.2 For cost of equipment other than basic service, provide funding, including annual funding for equipment maintenance.

CH2.3.3 All Personnel:

CH2.3.3.1 Persons involved with commercial contracting shall ensure, that when a commercial contractor is employed to develop, construct, or operate a device that radiates or reradiates a radio signal, the acquired RFs shall be obtained or coordinated through MSFC channels (Center Spectrum Manager). Although other NASA contracting agencies may write the NASA contract itself, frequencies required for contracts under the direction and/or purview of MSFC shall be obtained through the responsible MSFC office/department representative.

CH2.3.3.2 Persons operating radio equipment, shall comply with the instructions on the use of radios that may be imposed by an announcement on the radio net in the event of severe weather conditions, special tests, or engine test firings.

CH2.3.3.3 Any person requiring research, development, components, or modifications of

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communication and electronic equipment or systems requiring RF support shall not initiate a requisition or purchase request for such equipment until frequency support has been established. An approved MSFC Form 1040 (RF Authorization) executed by the MSFC spectrum manager shall be made a part of the specifications included with the purchase request or requisition.

CH2.3.4 The Center Spectrum Manager shall certify that the required radio spectrum is authorized for requests to purchase equipment capable of transmitting radio frequencies at any location under the responsibility of MSFC.

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## APPENDIX A-2

### PROVISIONS FOR RF ASSIGNMENT AND ALLOCATION

A-2.1 Detailed provisions for RF assignment and allocation shall apply to:

A-2.1.1 The research and development, construction, operation, and/or first production of communications and electronic devices or subassemblies for MSFC which radiate or reradiate RF signals and in which acquisition of functioning hardware is the principal objective.

A-2.1.2 The functional modifications of such equipment which would render a previous frequency allocation inapplicable.

A-2.1.3 Acquisition of communications and electronic equipment or systems through requisition, transfer, or procurement.

A-2.2 Conditions of RF assignment and allocation:

A-2.2.1 All frequencies assigned through NASA channels for experimental purposes shall be used for operation in support of research and development activities or assigned on a non-interference basis unless stated on the authorization.

A-2.2.2 Radio transmitters shall be operated by adequately trained and designated personnel and in a manner conforming to established and accepted procedure.

A-2.2.3 Transmitter operation shall be conducted on authorized frequency only.

A-2.2.4 Power, emission, and conditions of assignment shall be adhered to at all times.

A-2.2.5 All radio transmissions shall be identified by the use of the authorized radio call sign.

A-2.2.6 Transmitter operation shall be held within prescribed tolerances unless otherwise authorized.

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## CHAPTER 3

### MULTIMEDIA AND VISUAL AIDS SERVICES

#### CH3.1 Definitions

CH3.1.1 Digital Television. Digital television capabilities include digital video cameras, editing, and compression and preparation for electronic delivery.

CH3.1.2 Film Archival and Storage. Documentation, storage, archiving, and maintenance of the Center's historical photographic and motion picture film materials.

CH3.1.3 Photographic Laboratory Equipment. Still photographic, motion picture, digital processing, and scanning equipment to meet Center mission photographic print, motion picture, and digital imaging requirements.

CH3.1.4 Photographic Laboratory Processing. Film processing and printing to support Center mission roles and functions.

CH3.1.5 Photography and Motion Picture Documentation. Services requiring photographic or motion picture documentation.

CH3.1.6 Video Cassette Recorders (VCRs) and Televisions (TVs). Equipment available for purchase and installation in MSFC offices.

CH3.1.7 Video Camera Service. Consumer grade video cameras for loan to Center organizations for a maximum period of 2 weeks.

CH3.1.8 Video Monitors in the Closed Circuit Centerwide Video Distribution System. Video monitors for the display of Centerwide closed circuit video in conference rooms, cafeterias, and assembly areas for the maximum coverage for employees.

CH3.1.9 Video and Photographic Services. Printing, processing of photographic materials, high-speed still and motion picture documentation, editing of video, transfers of film to video, digital photography, and digital processes, etc.

CH3.1.10 Visual Aid. A photograph, negative, viewgraph, or slide provided by the MSFC Visual Aids Library in the performance of official NASA business.

#### CH3.2 Responsibility

CH3.2.1 Office of the CIO responsibility:

CH3.2.1.1 Office of the CIO exclusively shall provide video, interactive multimedia, motion picture and photographic services for the Center. Any request to obtain these services from another source and requests to purchase any type of photographic, digital imaging, or video

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equipment shall be approved by a designated Office of the CIO representative, as prescribed in the Initiating Procurement Requisitions (MWI 5100.1).

CH3.2.1.2 Video, Photography, and Motion Picture Documentation – Services requiring photographic, video, or motion picture documentation shall be provided by the Office of the CIO.

CH3.2.1.3 Digital Photography – Services requiring digital photography, scanning, and printing shall be provided by the Office of the CIO. The Office of the CIO shall provide consumer grade digital cameras for loan to Center organizations on an as-needed basis for a maximum period of 2 weeks or for the duration of the assignment. Web insertion of digital products shall be provided by the Office of the CIO as appropriate.

CH3.2.1.4 Closed Circuit Television (CCTV) – The Office of the CIO shall be responsible for the MSFC closed circuit television system and the repair/maintenance of all associated equipment; the technical determination as to whether or not an event/activity could be televised; a graphic notification posted on CCTV that an event is forthcoming; and the system activation.

CH3.2.1.5 Video Monitors in the Closed Circuit Centerwide Video Distribution System - Video monitors for the display of Centerwide closed circuit video shall be provided in conference rooms, cafeterias, and assembly areas for the maximum coverage for employees. The placement of the video monitors shall be coordinated by the Office of the CIO with the organizational management responsible for the area.

CH3.2.1.6 Digital Television (DTV) - Services requiring the use of DTV technologies, including video recording, editing, and compression for delivery via Internet or digital disks shall be the responsibility of the Office of the CIO unless granted exception by the Office of the CIO.

CH3.2.1.7 Emergency Warning System (EWS) - Equipment shall be provided by the Office of the CIO for the maximum coverage for MSFC personnel. The coverage to be provided shall be determined by the MSFC Emergency Preparedness Officer.

CH3.2.1.8 Visual Aids Library – The Office of the CIO shall operate the MSFC Visual Aids Library (consisting of a comprehensive pictorial index and files having potential use in presentations by MSFC organizations) and furnish assistance to clients in the selection of appropriate visual aids.

CH3.2.2 Directors/Managers of Basic Organizations or designated representatives(s) responsibilities:

CH3.2.2.1 CCTV - Heads of MSFC basic organizations desiring an event/activity to be presented on the MSFC CCTV system shall be responsible for securing approval of the Director, Center Operations.



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CH3.2.2.2 Visual Aids Library – Shall review existing resources maintained in the MSFC Visual Aids Library before requesting additional or new material.

### **CH3.3 Procedure**

CH3.3.1 Video and Photographic Services - Requesters shall order video and photographic services via the SRS as described in Document Content - Section 3 of this document. Video and photographic support that would require travel, overtime, scripting and editing, or specific funding shall require approval by a department manager or equivalent level of management. In such cases, the Office of the CIO approval shall be required for final provision of the requested support.

CH3.3.2 Video Tape Recorder-Player/Monitor Units - A group of video cassette recorder-player/monitor units shall be made available through the Office of the CIO for loan to Center organizations for a maximum period of 2 weeks. Requests for loan shall be made through the SRS. The provision of this equipment for a longer period shall require funding before procurement and provision of the equipment by the Office of the CIO.

CH3.3.3 Video Cameras - Consumer quality video cameras shall be available for loan by the Office of the CIO as requested via the SRS. Exceptions shall be approved by the Office of the CIO.

CH3.3.4 Video Monitors in Departments/Offices - Video monitors located in departments/offices shall require the approval of the director/manager. Monitors shall be mounted in metal ceiling hangers or on shelves. Floor display cabinets or other means of support shall be acquired through the One Stop Shop online system.

CH3.3.5 Video and Interactive Compact Disk ROM Format (CD-ROM) and Digital Video Disk (DVD) Productions - Scripted video and/or interactive CD-ROM/DVD productions shall require approval of the MSFC Audiovisual Review Board (MPD 1394.1) before proceeding. MSFC Form 2325 shall be signed by the directorate/office manager and forwarded to the secretary of the Audiovisual Review Board. Use of NASA emblems and insignia within video and interactive CD-ROM/DVD productions shall adhere to guidelines outlined in 14 CFR 1221. Requests for scripted video and interactive CD-ROM productions shall be made via the One Stop Shop online ordering system. A producer shall then be assigned to assure the other procedures are followed properly.

CH3.3.6 Distribution of a video or live event on the MSFC CCTV System - Requests for distribution of a live event or a video shall be submitted via the SRS. The request shall generate an e-mail to the Director, Center Operations Directorate, who shall approve playbacks on the CCTV system. Upon approval of the request, the Office of the CIO shall coordinate and execute the CCTV distribution.